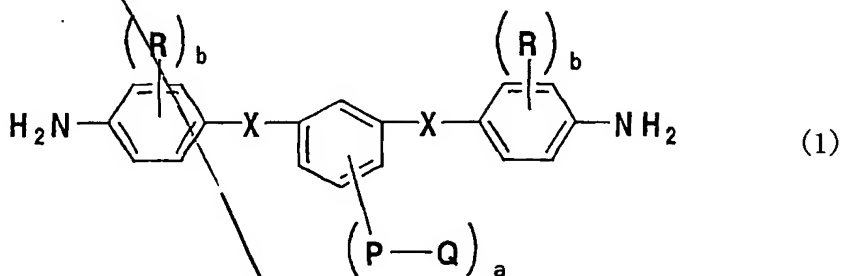


CLAIMS

1. A diaminobenzene derivative represented by the general formula (1):

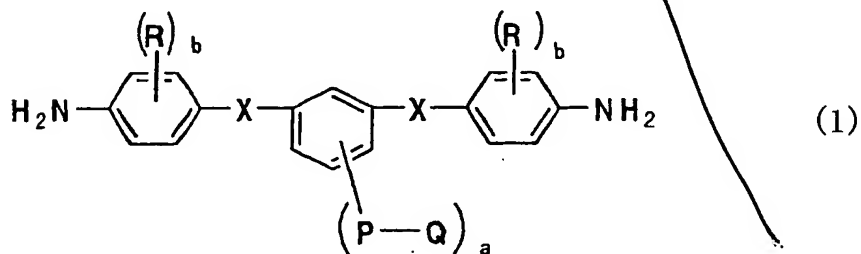


5 (wherein each of X and P which are independent of each other, is a single bond or a bivalent organic group selected from -O-, -COO-, -OCO-, -CONH- and -NHCO-, Q is a C₁₋₂₂ straight chain alkyl group or straight chain fluoroalkyl group, a is an integer of from 1 to 4 and

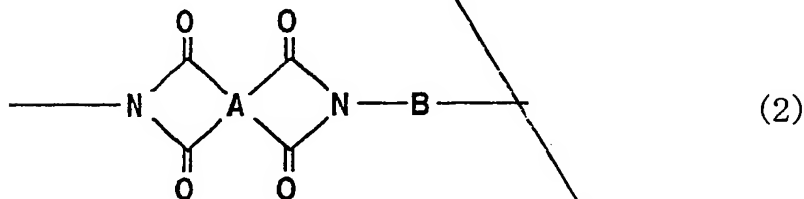
10 represents the number of substituents, R is a substituent selected from fluorine, a methyl group and a trifluoromethyl group, and b is an integer of from 0 to 4 and represents the number of substituents).

2. A polyimide obtained by reacting a diamine containing

15 at least 1 mol% of a diaminobenzene derivative represented by the general formula (1):



wherein each of X and P which are independent of each other, is a single bond or a bivalent organic group selected from -O-, -COO-, -OCO-, -CONH- and -NHCO-, Q is a C₁₋₂₂ straight chain alkyl group or straight chain fluoroalkyl group, a is an integer of from 1 to 4 and represents the number of substituents, R is a substituent selected from fluorine, a methyl group and a trifluoromethyl group, and b is an integer of from 0 to 4 and represents the number of substituents), with at least one compound selected from a tetracarboxylic dianhydride and its derivatives, to obtain a polyimide precursor having a reduced viscosity of from 0.05 to 5.0 dL/g (in N-methylpyrrolidone at a temperature of 30°C, concentration: 0.5 g/dL) and ring-closing it, and having a repeating unit represented by the general formula (2):

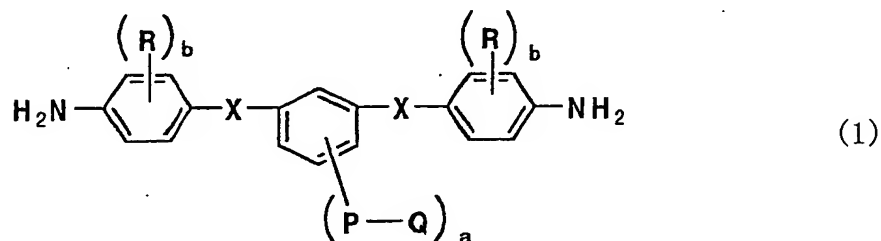


(wherein A is a tetravalent organic group constituting a tetracarboxylic acid, and B is a bivalent organic group constituting a diamine).

3. The polyimide according to Claim 2, wherein the tetracarboxylic dianhydride is an alicyclic tetracarboxylic dianhydride.

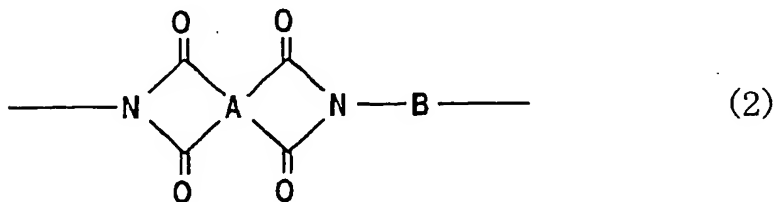
4 The polyimide according to Claim 3, wherein the
 alicyclic tetracarboxylic dianhydride is at least one
 tetracarboxylic dianhydride selected from 1,2,3,4-
 cyclobutane tetracarboxylic dianhydride, bicyclo[3,3,0]-
 5 octane tetracarboxylic dianhydride, 3,4-dicarboxy-
 1,2,3,4-tetrahydro-1-naphthalene succinic dianhydride and
 3,5,6-tricarboxynorbornane-2:3,5:6 dianhydride.

5. A liquid crystal alignment film containing a
 polyimide obtained by reacting a diamine containing at
 10 least 1 mol% of a diaminobenzene derivative represented
 by the general formula (1):



(wherein each of X and P which are independent of each
 other, is a single bond or a bivalent organic group
 15 selected from -O-, -COO-, -OCO-, -CONH- and -NHCO-, Q is
 a C₁₋₂₂ straight chain alkyl group or straight chain
 fluoroalkyl group, a is an integer of from 1 to 4 and
 represents the number of substituents, R is a substituent
 selected from fluorine, a methyl group and a
 20 trifluoromethyl group, and b is an integer of from 0 to 4
 and represents the number of substituents), with at least
 one compound selected from a tetracarboxylic dianhydride
 and its derivatives, to obtain a polyimide precursor

having a reduced viscosity of from 0.05 to 5.0 d_l/g (in N-methylpyrrolidone at a temperature of 30°C, concentration: 0.5 g/d_l) and ring-closing it, and having a repeating unit represented by the general formula (2):



5

(wherein A is a tetravalent organic group constituting a tetracarboxylic acid, and B is a bivalent organic group constituting a diamine).

6. The liquid crystal alignment film according to Claim 5, wherein the tetracarboxylic dianhydride is an alicyclic tetracarboxylic dianhydride.

7. The liquid crystal alignment film according to Claim 6, wherein the alicyclic tetracarboxylic dianhydride is at least one tetracarboxylic dianhydride selected from 1,2,3,4-cyclobutane tetracarboxylic dianhydride, bicyclo[3,3,0]-octane tetracarboxylic dianhydride, 3,4-dicarboxy-1,2,3,4-tetrahydro-1-naphthalene succinic dianhydride and 3,5,6-tricarboxynorbornane-2:3,5:6 dianhydride.

20

Ad
A₁

10018860-122601
109221"09881001

(in the formula (1), each of X and P which are independent of each other, is a single bond or a bivalent organic group selected from -O-, -COO-, -OCO-, -CONH- and -NHCO-, Q is a C₁₋₂₂ straight chain alkyl group or
5 straight chain fluoroalkyl group, a is an integer of from 1 to 4 and represents the number of substituents, R is a substituent selected from fluorine, a methyl group and a trifluoromethyl group, and b is an integer of from 0 to 4 and represents the number of substituents, and in the
10 formula (2), A is a tetravalent organic group constituting a tetracarboxylic acid, and B is a bivalent organic group constituting a diamine).

10018860 123501